WHITE PAPER

SERVICE AND CARE COORDINATION
DELIVERABLE #2

OCCUPATIONAL HEALTH SERVICES PILOT PROJECT

Draft : October 6, 2000

Introduction

Research for the white paper on enhancing attending physicians' occupational health expertise revealed that Washington physicians who treat injured workers are less likely to perform certain key steps in the management of injured workers than are physicians in model occupational medicine programs nationally. This deficit stems, in part, from the failure of standard medical education to address issues of worker injury management. That white paper suggests options to improve Washington physicians' occupational medicine expertise and, in that process, proposes a key role for the envisioned Centers of Occupational Health and Education (COHE).

Physicians, however, do not practice in a vacuum; the surrounding occupational medicine delivery system can significantly impact them. For increased physician knowledge to translate into improved practice behaviors, the delivery system must encourage and support this change. Upcoming white papers describe aspects of how disparate components can be integrated into a pilot occupational medicine delivery system with Centers of Occupational Health and Education at the core.

This white paper discusses the evolution of occupational medicine delivery systems [in Appendix A]. It assesses current work injury management functions in Washington and provides options for the development of a state-of-the-art, care coordination system that would have the ability to enhance the system's impact, communication and speed.

Key provisions of the Washington workers' compensation system which impact this discussion

At the outset, any discussion of occupational medicine delivery system design must respect and affirm three key provisions of the Washington Workers' Compensation system:

1) Washington is a worker choice state;

2) Managed care is not one of the options being pursued during this project; and

3) L&I's collective bargaining agreement prevents contracting out services currently performed by state employees.

Purpose

The purpose of this white paper is to identify, evaluate, and prioritize methods of service and care coordination most likely to prevent long-term disability.

The recommendations in this white paper are based on:

- Survey results from a random sample of 186 physicians who treat injured workers in Washington regarding their experience with communication, quality of care, and care timing issues as it relates to L&I's claim adjudication system.
- Survey results from twenty-three model occupational medicine programs from throughout the United States that were identified as providing excellent occupational medical care.
- Survey results from a random group of 201 Washington employers regarding important quality indicators for occupational medicine.
- A review of the existing workers' compensation adjudication/claims adjudication program in Washington and comparable programs in other states.
- A review of the medical literature on work injury care coordination.
- Review of results from L&I's Managed Care Pilot Project.
- Interviews with representatives of claims management staffs from numerous workers' compensation insurance organizations throughout the United States.

Terminology

Occupational medicine delivery systems have many different injury management roles. This white paper focuses on claims administration, medical case management, and care coordination. Because the descriptions of these roles are often imprecise, we need to clarify the terminology before proceeding:

Claims administration: This is an insurance function. Claims administration involves determining whether a claim for benefits is valid, what benefits a claimant is entitled to, and whether requested services are consistent with an accepted claim.

Medical case management: This is a medical function. Medical case management involves determining the correct type and sequence of medical care necessary to effectively treat a medical problem. Physicians and their office staffs most commonly perform this function. It is also performed by other organizations, such as insurance companies or rehabilitation consultants. Considerable controversy arises when non-medical personnel perform medical case management -- particularly when non-medical personnel deny care that has been ordered by a patient's treating physician.

Care coordination: This is an administrative function. Care coordination involves expediting medical care that has been ordered by the treating physician and ensuring that issues affecting the workplace (such as return to limited work or workplace modifications) have been communicated and implemented. Numerous members of the occupational medicine delivery system can perform this function: medical office staff, rehabilitation workers, employer personnel or safety representatives, union representatives, etc.

The role of the workers' compensation adjudicators

A central role in Washington's workers' compensation system is the workers' compensation adjudicator. The workers' compensation adjudicators' job is extremely challenging. Adjudicators manage both the insurance and medical aspects of a worker's compensation claim; often simultaneously performing claims administration and medical case management functions:

- They determine the compensability of the claim, assessing the nature of the alleged injury, the employment status of the worker, and applicable rules and regulations.

- They steer medical treatment using treatment guidelines[1] and consultations with nurses and medical consultants from L&I and the utilization review vendor to approve or deny payment for treatment requested by treating physicians.

Although adjudicators often have contact with the parties to a workers' compensation case, they rarely perform traditional care coordination

[1] Office of the Medical Director Medical Treatment Guidelines, Washington State Department of Labor and Industry, June 1999. Health Care Management Guidelines, volume 7, Workers' Compensation, Edited by James M. Schibanoff, M.D. Copyright 1996, 1997, 1998, Milliman and Robertson, Inc.

functions such as expediting treatment, enhancing communication or facilitating safe return to work.

Physicians' perceptions of the impact of the workers' compensation staff on quality and timeliness, communication and authorization delays in the delivery of medical care to injured workers

Research for this white paper measured Washington physicians' perceptions of workers' compensation medical management's impact on quality and timeliness, demonstrated communication skill, and authorization delays and compared those perceptions to the attitudes of a national group of model occupational health programs.

Quality and Timeliness: Table 1 summarizes research on physicians' assessment of the impact of medical case management on the quality and timeliness of medical care. The data demonstrate that, on average, national model programs and Washington physicians view the impact of medical case management performed by state agencies and workers' compensation insurers as essentially neutral – having no significant positive or negative effect.[2] Although the study found no significant differences in opinion between the two groups, Washington physicians expressed a wider range of opinions and were, on average, very slightly positive in their attitudes about the overall impact of case management, while the model programs were very slightly negative.

Table 1: Assessment of the Impact of Case Management on the Quality and Timeliness on Medical Care

	Model Programs	Washington
Improves Considerably	0%	11%
Improves Somewhat	12%	27%
Neutral	65%	37%
Worsens Somewhat	23%	17%
Worsens Considerably	0%	8%

Communication: Communication between physicians and the workers' compensation staff is critical for the effective management of work injuries. Research for this white paper found that physicians felt this communication was generally good or excellent. Although the Washington providers rated their communication with workers' compensation adjudicators somewhat lower than did national model programs, the

[2] Seventeen of the national programs and 161 of the Washington providers rated case managers' efficiency in the question: "What effect does case management from the Bureau of Workers Compensation, Department of Labor and Industries and/or Insurance Company have on the quality and timeliness of medical care?" Ratings ranged from +2 (improves it considerably) to –2 (worsens it considerably). The mean national response was –0.12; the mean Washington response was +0.14.

research found no significant differences between the two groups.[3] Table 2 summarizes the results:

Table 2: Characterization of Ability to Communicate with Staff at L&I (or comparable agency in other states)

	Model Programs	Washington
Excellent	33%	15%
Good	56%	56%
Fair	6%	24%
Poor	5%	5%

Authorization Delays: Research performed for this white paper assessed physician perceptions about whether care provided in Washington was delayed by obtaining authorizations and approvals, and if those authorization delays did occur, how they compared to those experienced to the national programs.

The research evaluated seven important diagnostic tests and treatments that are required to help reduce long-term disability from common work-related injuries. Table 3 summarizes the findings:

Table 3: Treatment Delays Caused By Authorization Practices (in days)[4]

	National Programs	Washington
Physical Therapy	1.2	4.0
Chiropractic Treatment	3.0	9.8
Electrodiagnostic Studies	2.6	6.2
Carpal Tunnel Surgery	3.3	10.2
Lumbar Spine Surgery	3.4	16.0
Chronic Pain Programs	3.3	10.7
MRI	2.0	6.0

The research found that physicians report that injured worker care is significantly delayed by the authorization process in Washington compared to that in the model programs. Washington physicians perceive that an injured worker can expect to wait for an extra 3.8 days for physical therapy to an extra 12.6 days for lumbar spine surgery.

[3] Responses were to the question: " How would you characterize your ability to effectively communicate with the staff at the Bureau of Workers Compensation (In Washington, Department of Labor and Industries)?"

[4] The study was performed by asking providers providing services how long their patient's care was generally delayed by issues such as authorization and scheduling. The information in the table represents average values for the survey group. There are alternative ways to arrive at this information; we do not assert that this method is superior.

Interpretation of the data on authorization delays should be interpreted with caution for several reasons:

1) The data represent physicians' perceptions not actual performance. It is possible that the physician perceptions do not accurately relate the actual authorization delays.

2) The data does not identify at what stage in the claims management process the delay occurs. As noted above, the workers' compensation adjudicators perform many functions. Delays could occur from medical authorization, claim allowance, data verification or a variety of other processes.

3) The research performed for this white paper cannot determine the reasons why this authorization delay exists. Here are some hypotheses:

- The reputation of the programs included in the model national occupational medicine programs might speed approvals for the treatment they recommend.
- Care requested in Washington might be more often inappropriate, causing treatment delays.
- Certain inefficiencies (inadequate staffing, inadequate communications, etc.) might exist in Washington that create excess delays.

Despite these reservations, the fact remains that physicians' perceive significant authorization delays in Washington. Delays can potentially adversely affect injured workers. Delays are also very important to employers -- research for this white paper indicates that Washington employers (86%) rate the speed of returning an injured worker to work to be a "very important" quality indicator. This is the top-rated quality indicator employers identify.

What is the desired future state?

The desired future state is for service and care coordination in Washington to be state-of-the-art. This coordination should exert a significantly positive impact on the quality of healthcare delivered to injured workers.

What are the best ways to achieve the desired future state?

The proposed Centers of Occupational Health and Education provide an opportunity to significantly improve the quality and timeliness of care provided to injured workers. By creating a state-of-the-art occupational medicine delivery system [as discussed in Appendix A] and utilizing a team approach to injury management [as discussed in Appendix C], the COHE has the capability to improve communication and reduce delays.

Key steps in creating this delivery system are:

A. Identify those providers committed to national best practice behaviors and link them to the COHE.

1. The COHE should play an important role in identifying and training these pilot physicians. [Deliverable #3 will discuss the relationship of the pilot providers and the COHE.]

B. Implement a team approach to managing worker injuries with care coordination centralized in the COHE.

1. The COHE should have a care coordinator who tracks the progress of injured worker care, facilitates medical treatment, and coordinates return to work for all injured workers treated by the COHE and its associated pilot physicians.

2. The COHE should serve as a single point contact for employers seeking information about the care of injured workers treated by the COHE and/or the pilot physicians.

3. The COHE should serve as an ombudsman to help injured workers and employers resolve problems and obtain information.

C. Select a specific group of L&I Workers' Compensation Adjudicators to work with the COHE and pilot physicians.

D. Create a new information system based on the Internet as a primary vehicle to integrate L&I, the COHE, the pilot physicians, workers, and employers.

1. Information systems should include encrypted electronic communication between group members.

2. Any information system design must enable multi-directional information flow, not just information flow from L&I to the providers. [The information system is discussed in detail in Deliverables #4 and #5.]

3. The information system must enhance the likelihood of the onset of care coordination within 24 hours of injury. Decreasing this timeline is possible, and has been shown to increase the efficiency of the system and decrease lost workdays.[5] Tying this goal to an "incentive" can enhance the desire to meet this goal. [6]

[5] United Healthcare Website, www.uhc.com

[6] Lower, J, "Changing physician behavior requires careful understanding of incentives." Report on Medical Guidelines and OutCome Research 8(19): 7-9, 1997

Appendix A

State-of-the-Art Occupational Medicine Delivery Systems

In the last 20 years, occupational medicine delivery systems have advanced through four design stages. Table 4 summarizes these stages in terms of their approach to care management, protocol usage, information technology and system integration.

Table 4: Stages of Occupational Medicine Delivery Systems Development

	Date Started	Care Management	Protocols	Communications	Delivery System Integration
1	Before 1981	None	None	None	None
2	1981	Care coordination	None	Paper	None
3	1986	Medical Case management	Consensus	Electronic	Horizontal
4	1997	Differential Authorization	Evidence-based	Internet	Vertical

Stage 1: Stage 1 occupational medicine delivery systems have no inspection of outcomes, treatment protocols, employer-provider communication, care coordination or delivery system integration. The parties to the claim have to chase down any and all information. These are expensive and inefficient systems. Injured workers routinely fall through the cracks in the system, promoting long-term disability. Although the most common type of delivery system before 1981, these systems are becoming increasingly rare.

Stage 2: In 1981, the introduction of the IBM PC and first injury tracking software made possible the occupational medicine delivery systems that attempted to systematically improve quality of injured worker care. Stage 2 systems utilize care coordinators who, although they make no clinical medical decisions, are able to significantly improve the quality of injured worker medical care by ensuring that 1) the worker does not get lost in the healthcare system and 2) the return-to-work process happens. As a general rule, stage 2 systems do not use treatment protocols. They communicate by paper between provider, employers, workers' compensation insurers, and state worker's compensation departments. They make little attempt to integrate the disparate components of the medical delivery system.

Over the years, these systems have demonstrated a consistent ability to significantly reduce long-term disability because of their focus on the return to work process. Stage 2 systems ushered in a period of rapid expansion of specialized occupational medicine programs from 1985 to 1992.

Stage 3: In the late 1980's, occupational medicine delivery systems emerged that were patterned after the managed care model that was sweeping general healthcare.[7] (Although in employee-choice states, like Washington, they do not use gatekeepers or closed physician panels.) As a result, these systems employ considerably larger administrative staffs than do stage 2 systems. Whereas stage 2 systems focus only on cost-control through reduction of lost-time expense, stage 3 systems seek to control medical costs as well. They do this by care denial and, in states where it is allowed, control of access to physicians. Recent research raises questions about the cost-savings of such approaches. Communication is often electronic, but computer systems rarely cross between groups (i.e., providers, employers and case managers all have their own computer systems that do not "talk" to each other).

Stage 4: Existing only since 1997 and still relatively rare, stage 4 systems represent the present state-of-the-art. Stage 4 systems use the Internet as their primary information management tool. The widespread introduction of secure socket encryption technology[8] (in 1996) made it possible for parties in different locations and organizations to collaborate. This provides a secure, multi-direction information flow that substantially improves system communication speed and enables multiple groups representing physicians, care coordinators and payers to be integrated into a single delivery system.

Stage 4 systems stratify providers based upon the providers' compliance with practice standards and treatment guidelines. Those providers who comply are freed from pre-authorization requirements for treatment in accepted claims -- eliminating the treatment delays for authorization that plague stage 3 systems. Elimination of care denials not only improves injured worker satisfaction, but also provides a powerful incentive for providers to participate. In addition, the system gives these providers a specific designation. The providers often display a plaque in their waiting rooms indicating this status.

Stage 4 systems begin to implement evidence-based guidelines to direct medical treatment. [Treatment Guidelines are discussed further in Appendix B.] Unfortunately, good evidence-based treatment guidelines are rare. What differentiates stage 4 systems from earlier delivery systems is the extent to which they work to integrate these protocols in the care as it is delivered.

[7] The percentage of employees enrolled in traditional indemnity insurance plans dropped from 52% in 1992 to 15% in 1997. In large employers (over 4000 employees), 85% of workers were enrolled in managed care for general health by 1997. Press Release: William M. Mercer, Incorporated, New York, January 20, 1998..

[8] For further information on Secure Socket Technology, see http://developer.netscape.com/docs/manuals/security/sslin/contents.htm

Appendix B

Treatment Guidelines

Twenty-three states (including Washington) have developed or are in the process of developing workers' compensation treatment guidelines.[9] Washington's occupational medicine treatment guidelines, developed by the Office of the Medical Director in collaboration with the Washington State Medical Association, are used primarily for provider education and for review criteria for the Utilization Review program.[10] [11] [12] [13] [14] These guidelines generally focus on inpatient procedures; they provide only a fraction of the decision-making guidance that physicians or claims managers might require.[15]

Washington's situation reflects the national experience: there is little, high quality research available to define best medical practices for most occupational injuries and illnesses. Many available practice guidelines are proprietary. Most proprietary guidelines are adapted from group health. As a result, they often do not adequately address occupational medicine diagnoses and fail to include preventive work site interventions.[16] The use of these guidelines is frequently controversial: guideline developers argue that they "support the efficient delivery of quality health care"; critics and lawsuits contend that the guidelines are "extremely restrictive and unreasonable and that health plans are using them to unfairly deny payment for needed care."[17]

The situation is slowly improving. The 1994 publication of *Acute Low Back Problems in Adults* by the Agency for Health Care Policy and Review[18] was a key event in this evolution; it was one of the first treatment guidelines to

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[9] Eccleston S and Yeager C, *Managed Care and Medical Cost containment in Workers' Compensation: A National Inventory*; Workers Compensation Research Institute; 1997.

[10] Office of the Medical Director Medical Treatment Guidelines, Washington State Department of Labor and Industry, June 1999. Health Care Management Guidelines, volume 7, Workers' Compensation, Edited by James M. Schibanoff, M.D. Copyright 1996,1997,1998, Milliman and Robertson, Inc

[11] Indications for Workers Compensation Clinical Management Copyright 1996,1999, InterQual Inc., A Division of Access Health Inc.

[12] Guidelines for Chiropractic Quality Assurance and Practice Parameters Edited by Scott Haldeman, David Chapman-Smith, and Donald Petersen. Copyright Aspen Publishers, 1993.

[13] Occupational Medicine Practice Guidelines, Edited by Jeffery S. Harris, M.D., MPH, MBA. The College of Occupational and Environmental Medicine. OEM Press 1997

[14] Acute Low Back Problems in Adults. Clinical Practice Guideline No 14 US Department of Health and Human Services, AHCPR Publications No 95-0642 December 1994

[15] Attending Doctor's Handbook, Washington State Department of Labor & Industries,. 1999; 31-48.

[16] Muller KL, et al., *"Acceptance and Self-Reported Use of National Occupational Medicine Practice Guidelines,"* Journal of Occupational and Environmental Medicine; 2000; 42; 4: 362-369.

[17] Martinez, B, "Insurance Health-Care Guidelines Are Assailed for Putting Patients Last" *Wall Street Journal* September 14, 2000.

[18] Acute Low Back Problems in Adults. Clinical Practice Guideline No 14 US Department of Health and Human Services, AHCPR Publications No 95-0642 December 1994

have a significant impact on the practice of occupational medicine.[19] In retrospect, these guidelines were an indication of the beginnings of a larger movement: evidence-based medicine.

Evidence-based medicine is a worldwide movement to tie medical treatment to a more scientific basis. Table 5 shows the explosion in the number of publications on evidence-based medicine since 1994.

Table 5: Number of Scientific Publications on the Topic of Evidence-Based Medicine Published, by Year[20]

Year	Articles
1994	1
1995	16
1996	63
1997	167
1998	307
1999	464

In 1997, American College of Occupational and Environmental Medicine (ACOEM) published its work-injury guidelines *"Occupational Medicine Practice Guidelines."* According to ACOEM, these guidelines use an evidence-based framework, 90-95% of the diagnoses seen in workers' compensation, and have had a broad technical review. [21] [22] ACOEM has made a concerted effort to encourage physicians to use the guidelines, document baseline practices and opinions, and study changes in physician behaviors and attitudes through its Guidelines Dissemination Project, which included kick-off training at its 1997 and 1998 conferences. Despite these efforts, the ACOEM guidelines are not widely used.[23] [24] [25]

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[19] Frank J; Sinclair S; Hogg-Johnson S; Shannon H; Bombardier C; Beaton D; Cole D, "Preventing disability from work-related low-back pain. New evidence gives new hope--if we can just get all the players onside." *CMAJ* 1998 Jun 16;158(12):1625-31

[20] Determined by MedLine search using the term "Evidence–Based Medicine"

[21] Harris JS et al., *"Evidence-Based Design: The ACOEM Practice Guidelines Dissemination Project,"* Journal of Occupational and Environmental Medicine; 2000; 42;4: 353.

[22] Muller KL, et al., *"Acceptance and Self-Reported Use of National Occupational Medicine Practice Guidelines,"* Journal of Occupational and Environmental Medicine; 2000; 42;4: 362-369.

[23] Harris JS et al., *"Evidence-Based Design: The ACOEM Practice Guidelines Dissemination Project,"* Journal of Occupational and Environmental Medicine; 2000; 42; 4: 354.

[24] Muller KL, et al., *"Acceptance and Self-Reported Use of National Occupational Medicine Practice Guidelines,"* Journal of Occupational and Environmental Medicine; 2000; 42;4: 362-369.

[25] Harris JS et al., *"Evidence-Based Design: The ACOEM Practice Guidelines Dissemination Project,"* Journal of Occupational and Environmental Medicine; 2000; 42;4: 354.

A review of the literature and physician interviews indicates that the following are some of the critical steps in the development and consistent use of valid, credible guidelines:

1. Identify a demonstrated need for the guidelines from audits, outcomes, and data analysis; the more specific the data by provider specialty the better, e.g., provide low back outcomes of family practitioners to family practitioners; low back outcomes for emergency medicine to ER physicians, etc.;
2. Back up the data with literature search or other appropriate information, e.g., how employer's premiums are affected by one (or more) lost time case(s), etc.;
3. Make clear, explicit links between the guideline recommendations and the data and desired outcomes;
4. Obtain the involvement and endorsement of all relevant professional groups;
5. Clearly explain how the guidelines were developed;
6. Disseminate the guidelines and attempt implementation;
7. Evaluate utilization and compliance, and identify opportunities for improvement to the guidelines; and
8. Make concise, easy-to-use guidelines readily available at the point of service.[26] [27] [28]

[26] Harris JS et al., *"Evidence-Based Design: The ACOEM Practice Guidelines Dissemination Project,"* Journal of Occupational and Environmental Medicine; 2000; 42;4: 354.
[27] Harris JS et al., *"Suggested Improvements in Practice Guidelines: Market Research to Support Clinical Quality Improvement,"* Journal of Occupational and Environmental Medicine; 2000; 42;4: 377-383.
[28] Schuman S et al., *"The Occupational and Environmental Medicine Gap in the Family Medicine curriculum: Five Key Elements in the South Carolina,"* Journal of Occupational and Environmental Medicine; 1997; 39;12: 1186-1190.

Appendix C

The Team Approach to Managing Worker Injuries[29] [30]

The proposed Centers for Occupational Health and Education (COHE) are envisioned to be the central hub of an occupational medicine delivery system that includes the COHE staff, pilot physicians and L&I. It will coordinate and direct the treatment of injured workers with an injury management team.

The Injury Management Team

The team that manages worker injuries should have at least five members: the treating physician, the employer representative, the L&I workers' compensation adjudicator, the care coordinator, and the injured worker. Each of these team members plays an important role in the injury management process.

- The team re-establishes the primary role of the *physician* as medical case manager. This is clearly more efficient than using an outside party to manage the case for the physician.

- The *employer representative* helps the physician understand company-specific issues, such as work rules that might restrict alternate duty job placement, overtime patterns, and interpersonal relationships among workers and between management and non-management staff.

- The *L&I workers' compensation adjudicator* can facilitate the process of claims approval and provide insight into factors that may cause delays in the treatment of the injured worker.

- The *injured worker* is often forgotten as the workers' compensation process grinds forward. In many cases, however, no single person understands more about his or her job, physical condition, and state of mind than the injured worker.

- The *care coordinator* holds the team together. The care coordinator does not make medical treatment decisions or approve medical care.

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[29] Nicewonger, D and W Newkirk, "Building Injury Management Systems that Contain Workers Compensation Costs" in Occupational Health Services: Practical Strategies for Improving Quality and Controlling Costs (Chicago: American Hospital Publishing, 1993) p.57-78.

[30] Nicewonger, D, "Injured Worker Tracking" in *Occupational Health Services: A Guide to Program Planning and Management* (Chicago: American Hospital Publishing, 1989) p.57-69.

The care coordinator ensures that all team members work with the same information base and share the same goals. The care coordinator also eliminates unnecessary delays in scheduling appointments, obtaining test results, and communicating work restrictions.

This team will change with each injury. In many communities however, the care coordinator will remain a constant member, giving the teams continuity and providing physicians and employers with a reliable contact point for all injuries.

Role of the Care Coordinator

The care coordinator improves communication, expedites and improves care and monitors the injury treatment process. Key care coordinator functions are:

1. Improving Communication

    - First Report: The first 72 hours is the most critical period in a worker injury. The procedures that initiate the injury management process can often dictate overall success. For that reason it is important for the care coordinator to develop a variety of methods of being notified of a worker injury. The care coordinator should seek notification from treating physicians, emergency departments, employers, injured workers, and other sources.

    - Treatment Follow-Up: The care coordinator contacts the employer and worker within 24 hours of the notice of injury. The employer contact is to notify the employer of the claim and start to work through the return-to-work issues. The employee contact is to make sure the employee is recovering, work with the employee to facilitate follow-up activities, and educate the employee about the workers' compensation system and his or her rights and responsibilities.

    - Work Restrictions: When an injured worker is treated, the treating physician must determine the injured worker's work capacity and provide the injured worker and employer with written work restrictions. The care coordinator must insure that the physician has provided restrictions, if appropriate, and that the restrictions are immediately transmitted to employer representative.

    - Ongoing Liaison and Resource: The care coordinator acts as a liaison and a resource to all the parties in the case: the injured

worker, L&I, the physician, physical therapists, occupational therapists, ergonomists, industrial hygienists, employer, union leadership, appropriate public health agencies and others. This can be particularly helpful for the injured worker in assisting with paperwork, helping explain the workers' compensation process, handling complaints and request etc.

- Conflict Resolution: Should conflict or disagreements arise between physicians, the injured worker and/or the employer, the care coordinator should facilitate resolution of the conflict by improving communication, establishing face-to-face meeting between parties, and/or utilizing an impartial physician.

2. Expediting and Improving Care

- Alternate Duty Programs: The employer must make every effort to accommodate the injured worker's restrictions. The care coordinator works to facilitate the worker's return to work. When the care coordinator encounters an employer unwilling to make accommodation, the coordinator starts a dialogue with the employer about developing alternative duty programs. If the employer is willing, the coordinator facilitates the COHE's involvement in the design of the alternative duty programs.

- Hazard Identification: Placement of an injured worker in the workplace may help identify ergonomic, workplace hazards because these will often be the functions that a injured worker cannot perform. When such hazards are identified, the care coordinator will assist the employer, if necessary, in seeking help to identify and ameliorate the hazard, including making referrals to an industrial hygienist, an ergonomist, or the WISHA consultation division.

- Scheduling Tests and Treatments: The care coordinator expedites treatment of the injured worker by improving scheduling of medical treatments and tests.

- Surveillance Programs: The care coordinator will serve as a facilitator for the development of surveillance programs as required by regulation, including the notification and instruction of employees regarding testing and the distribution of testing results.

3. Monitoring the Process

- Computerized Injury Tracking: The care coordinator uses specialized occupational medicine information systems to monitor care. The coordinator closely tracks cases at risk of

becoming lost in workers' compensation system, cases where the physician has removed the worker from work, and cases where the worker has work capacity that the employer has not accommodated.

- Disability Prevention: The care coordinator seeks to identify at the earliest possible time cases with risk of long-term disability so that intervention can take place. In complex cases, the coordinator may assemble an inter-disciplinary team to help manage the case.

- Outcome Measurement: The care coordinator tracks the injured worker until a safe return to work has occurred and the case is closed. Using the information system, the care coordinator tracks outcomes to identify areas for improvement.

- Sentinel Events: The care coordinator must coordinate the COHE's response to sentinel events that may indicate the presence of more widespread occupational illness or an indication of a significant system failure.